



ADVANCEBIBETA⁴

Produktpräsentation
Product presentation
Présentation produit



ADVANCE BIBETA⁴

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Thank you for flying ADVANCE®

Share wonderful Moments

A pleasure shared is a pleasure doubled. The BIBETA 4 tandem paraglider is the perfect choice when great moments are to be experienced together.

For leisure pilots it delivers a lot of fun – with safety; for the professional it makes an effective and trusty workhorse for everyday use.





some things
you just have to do
alone and selfishly
to be able to
experience them
in their whole
intensity

some think
until they try it
with someone else
that is the magic
of the BIBETA 4

Share wonderful Moments

Outstanding Characteristics

Efficient - Enjoyable working day

Little input, lots of output: an effective and infinitely-variable big ears system with hold-in function (Vary-Grip-System / see point ① Riser Illustration) and direct handling with low steering loads define the BIBETA 4. Trim (see point ② Riser Illustration), with an extremely large working range, broadens the BIBETA 4's operating envelope, and improved line geometry reduces sorting to a few flicks of the wrist.

Comfortable - Guaranteed sense of well-being

Passengers feel comfortable every time, from takeoff to landing. The BIBETA 4 pulls up quickly and easily, and is beautifully stable in direction and pitch in the air – almost like being on rails. The Vary-Grip-System can be applied very quickly in combination with trim when it's necessary to lose height and maintain a passenger's sense of well-being.

Robust - Maximum flying life thanks to the Smart Sail System

A tandem pilot demands a lot from his glider, especially for professional use. That's why the BIBETA 4 is made of robust materials and uses the Smart Sail System: the leading edge fabric is specially impregnated, and the Ripstop-Material is ideally aligned to suit the various diagonal loads in this area.



EFFICIENT



COMFORTABLE



ROBUST

Other important details

Brake Handles with Aluminium Bars

The aluminium brake bars can be fitted at the pilot's discretion: they provide comfortable brake handling, a stress-free handhold and direct, precise steering (see point 3 Riser Illustration).

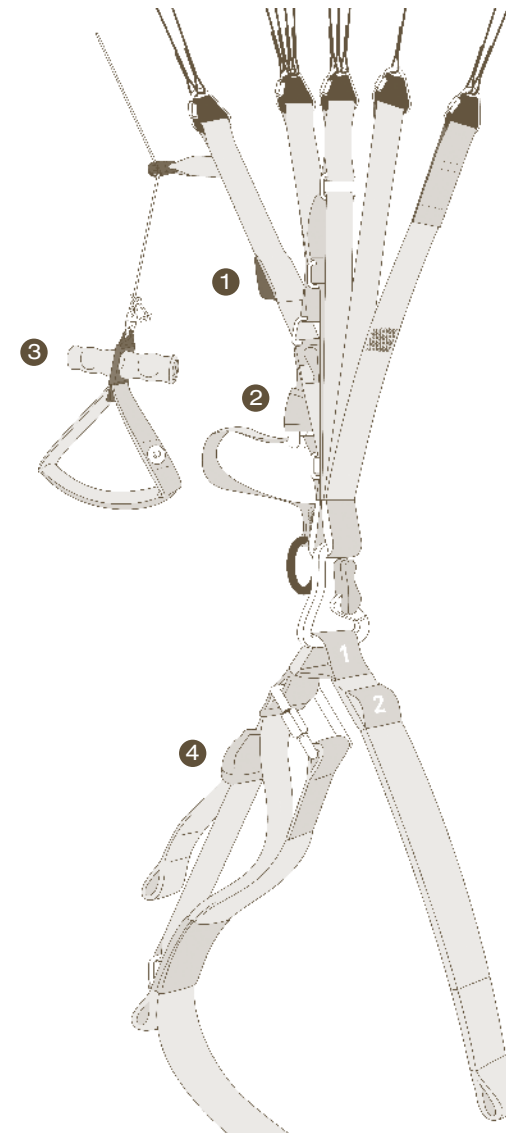
Spreaders adjustable for height

The BIBETA 4 is delivered with hard, soft or soft adjustable spreaders. The adjustable soft supports are infinitely variable to accommodate different passenger sizes. Clever design means that these can be adjusted in flight (see point 4 Riser Illustration).

Optimal weight distribution

The BIBETA 4 line attachment configuration is designed for optimal load distribution. The lift forces are highest in the centre of the wing, and the attachment point density is suitably higher here than at the wingtips. This also means that the BIBETA 4 will resist deformation, even after much use, and will retain its takeoff qualities and canopy shape.

Illustration: Soft adjustable spreader ►



Speed system/Trim

The BIBETA 4 has an accelerate system in the form of trim (see point ① Riser Illustration). It is very effective and easy to use. It provides for a significant increase in speed of 6-7 km/h.

The BIBETA 4 accelerate system is not only intended to provide a better performance reserve for dealing with strong winds (e.g. slope soaring, strong valley winds), but it also increases the glider's general user-friendliness, mainly when carrying light passengers. In addition, when used with big ears (Vary-Grip-System), the trim improves the most agreeable way of getting down if passenger well-being requires it.

In accelerated flight the rear risers are lengthened and this reduces the angle of attack of the wing. The accelerate system on the BIBETA 4 is so designed that the wing profile remains the same in accelerated flight (reduced angle of attack). This keeps the best wing shape at higher speeds.

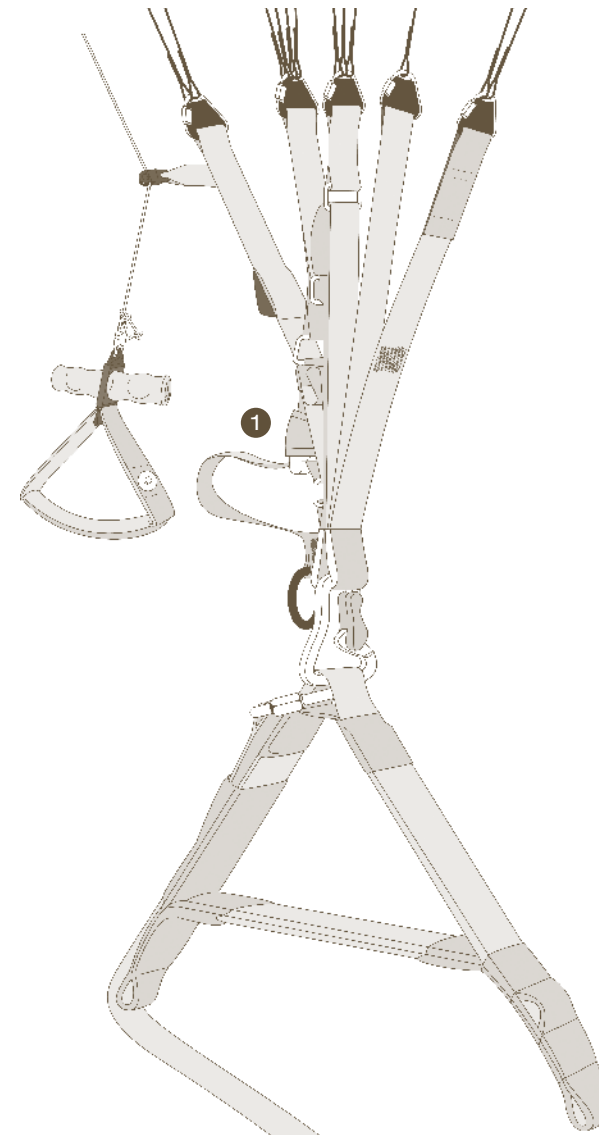


Illustration: Hard spreader ►

Big Ears System

The BIBETA 4 has split A-risers, which make the application of big ears easy. A cleat (Vary-Grip-System / see point ③ Riser Illustration) makes it possible to fix the outer A-lines so that they can be held in for an extended period (see point ② Riser Illustration).

The lines can be brought in as far as the marks, and fixed again in the cleats. With big ears applied the glider can be steered in the normal way with brakes.

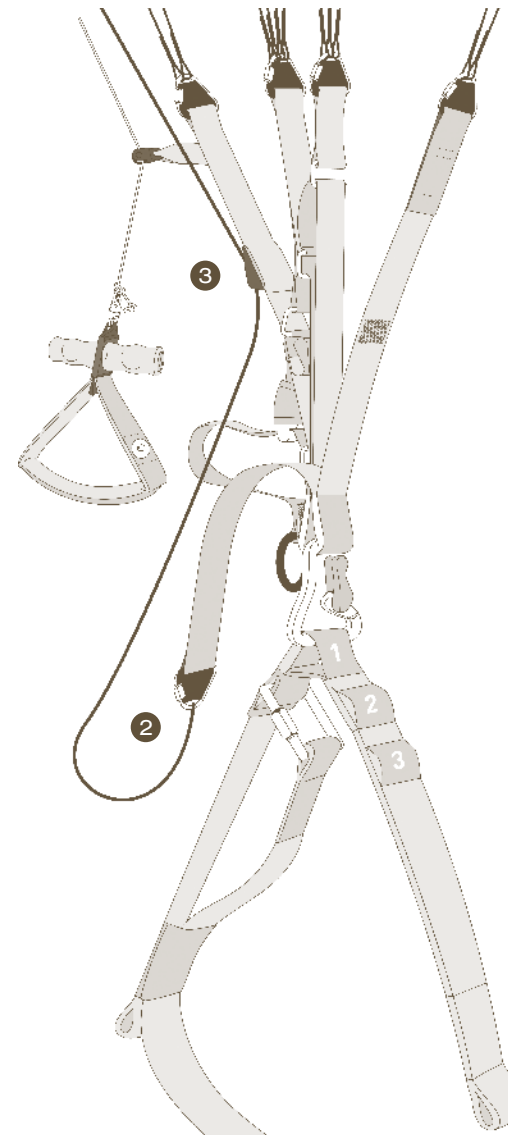


Illustration: Soft spreader ▶

Aluminium brake bars

The aluminium bars are a practical way of creating comfortable brake handling. They make for a tension-free hand-hold and help with direct and precise steering.

To fit them just screw the two halves together by hand through the eyelets on the brake handles.

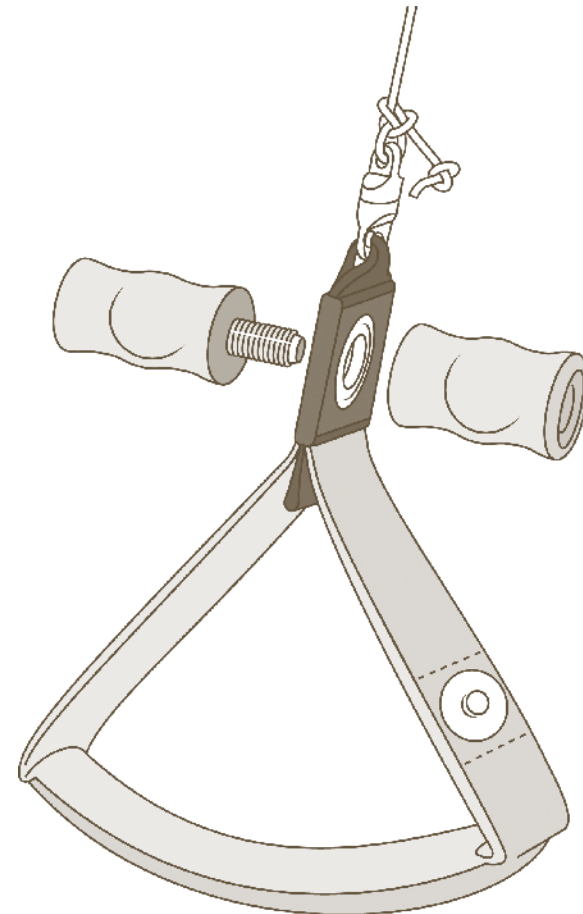


Illustration: Aluminium bars and ADVANCE brake handles with the eyelets ►

Materials used

The BIBETA 4, like all ADVANCE products, is produced as the result of the latest developments and experience in the sport. All the materials used in the construction of our paragliders have been carefully selected in order to ensure that our products have a long service life.

Materials are systematically evaluated, and all canopies undergo our rigorous quality control testing.

Leading edge:	New Skytex 6.6 Evolution water-repellent, 9092 E117, 44 gr/m2
Top surface:	New Skytex 6.6 water-repellent, 9017 E77A, 40 gr/m2
Bottom surface:	New Skytex 6.6 water-repellent, 9017 E77A, 40 gr/m2
Supported ribs:	New Skytex 6.6, 9092 E38A, 44 gr/m2
Unsupported ribs:	New Skytex 6.6, 9017 E38A, 40 gr/m2
Enclosing strap of the leading edge and trailing edge:	Polyester/Mylar, 20 mm
Enclosing strap of the leading edge lower surface:	Polyamid, 16 mm

Lines:	Edelrid Technora (Aramid) 6843, 340/240 sheathed, 2.4/2.1 mm (main lines) Edelrid Technora (Aramid), 6843, 240/200/160 sheathed, 2.1/1.9/1.6 mm (2nd level) Liros Dynema, PPSL 120, sheathed, 1.15 mm (1st level)
Risers:	Polyester 25 mm / 1.5 mm, 1400 kg
Quick links:	Maillon Rapide, Inox stainless, 4 mm - 1000 kg

Certification

The BIBETA 4 has been awarded LTF 1-2 and EN C for both sizes in both unaccelerated and accelerated flight. The certification reports can be downloaded from www.advance.ch.

Certification ratings can only provide limited information about a paraglider's flying behaviour in thermally active and turbulent air. The certification is based primarily on provoked extreme flight manoeuvres in non-turbulent air.

During the development of an ADVANCE paraglider, the emphasis is first and foremost on flying behaviour and handling and not exclusively on the certification test. The result is a well-rounded product with the familiar ADVANCE handling. Nevertheless, certification rating occupies a significant proportion of the specifications that have to be met.



Colours

Colour code - Leading edge & winglets / design stripe / top & bottom surface



STEEL - gold / petrol / steel



WHITE - red / petrol / white



RED - gold / white / red



YELLOW - red / white / yellow

Special colours: The leading edge is available only in orange, red, petrol, white or gold due to the special fabric.

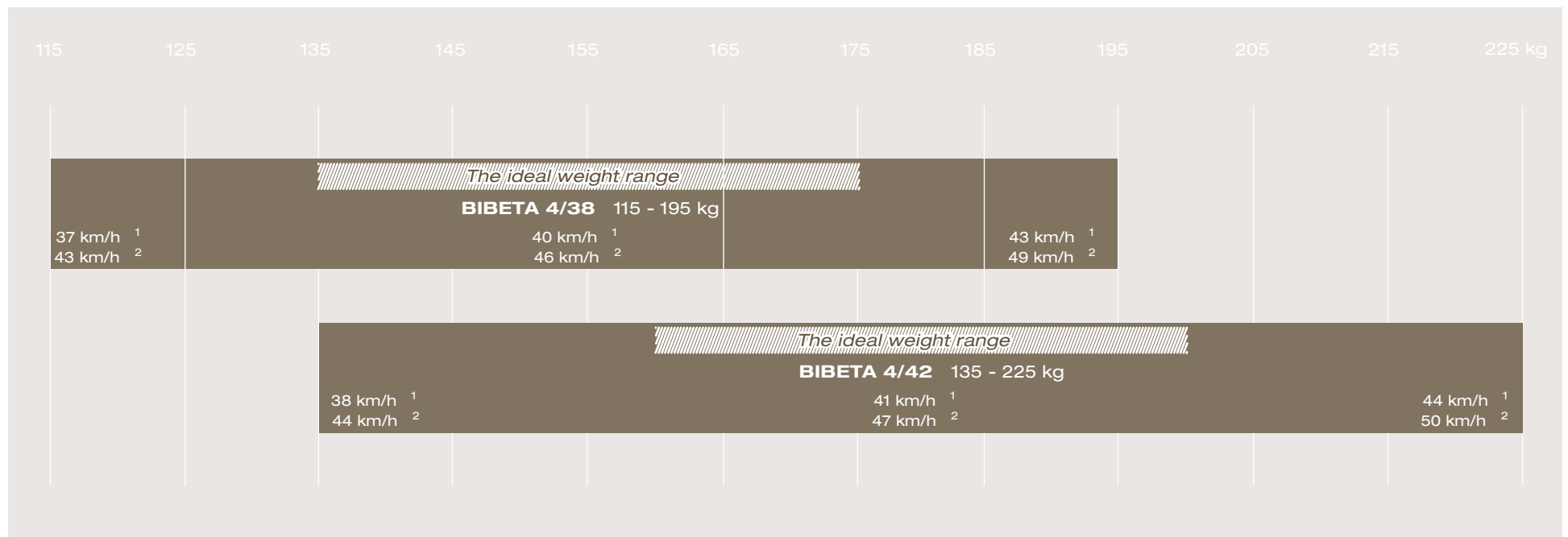
Technical details



BIBETA 4		38	42
Flat surface	m2	38.0	42.0
Projected surface	m2	32.03	35.41
Span	m	14.06	14.78
Projected span	m	10.89	11.45
Aspect ratio			5.2
Projected aspect ratio			3.71
Max chord	m	3.38	3.56
Min chord	m	0.68	0.71
Take off weight ²	kg	115 - 195	135 - 225
Glider weight	kg	8.5	9.2
Number of cells			49
Number of risers			5
Risers length	cm	34	34
Maxi length of the lines with the risers	m	8.7	9.1
Trimmer			yes
Symmetric control travel	cm	> 65	> 65
Min. speed ¹	km/h		24 +/-3
Trim speed ¹	km/h		41 +/-3
Max. speed ¹	km/h		47 +/-3
Min. sink rate ¹	m/s		1.2
Travel of the accelerator	cm	12.0	12.5
Best glide ¹		8.0 +/-0.2	8.1 +/-0.2
Motorised flight			no
Certification			EN C / LTF 1-2

¹ Values depending on wing loading, pilot/passenger/harness and glider size
² Pilot, passenger, wing, equipment

What size ?

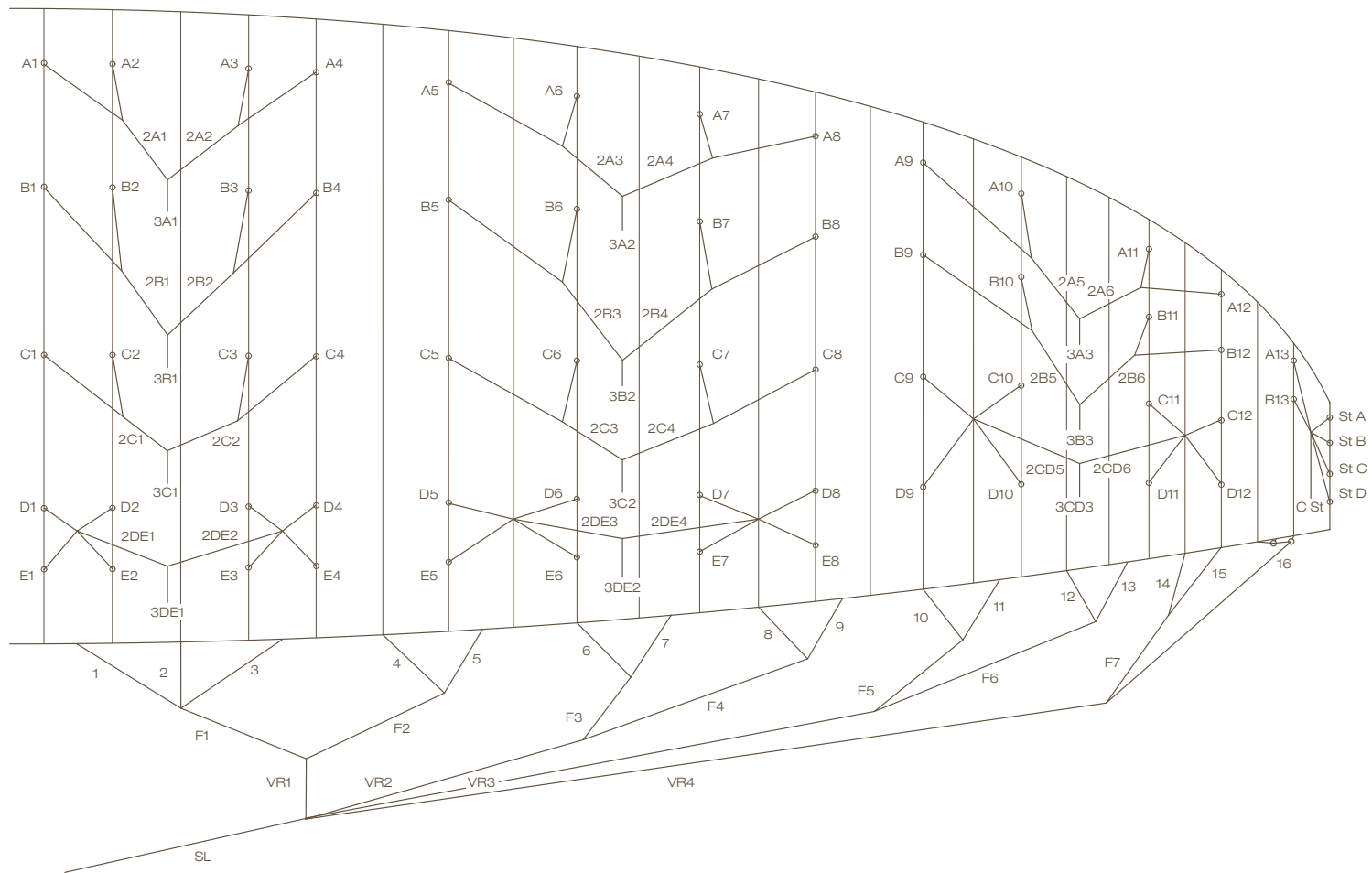


The very effective trim system allows the pilot to adjust the flying qualities of the BIBETA 4 to the current conditions (e.g. valley wind), even with being outside of the optimal weight range.

- 1 indicated air speed trims closed
- 2 indicated air speed trims open

Line diagram

ADVANCEBIBETA⁴ 38/42

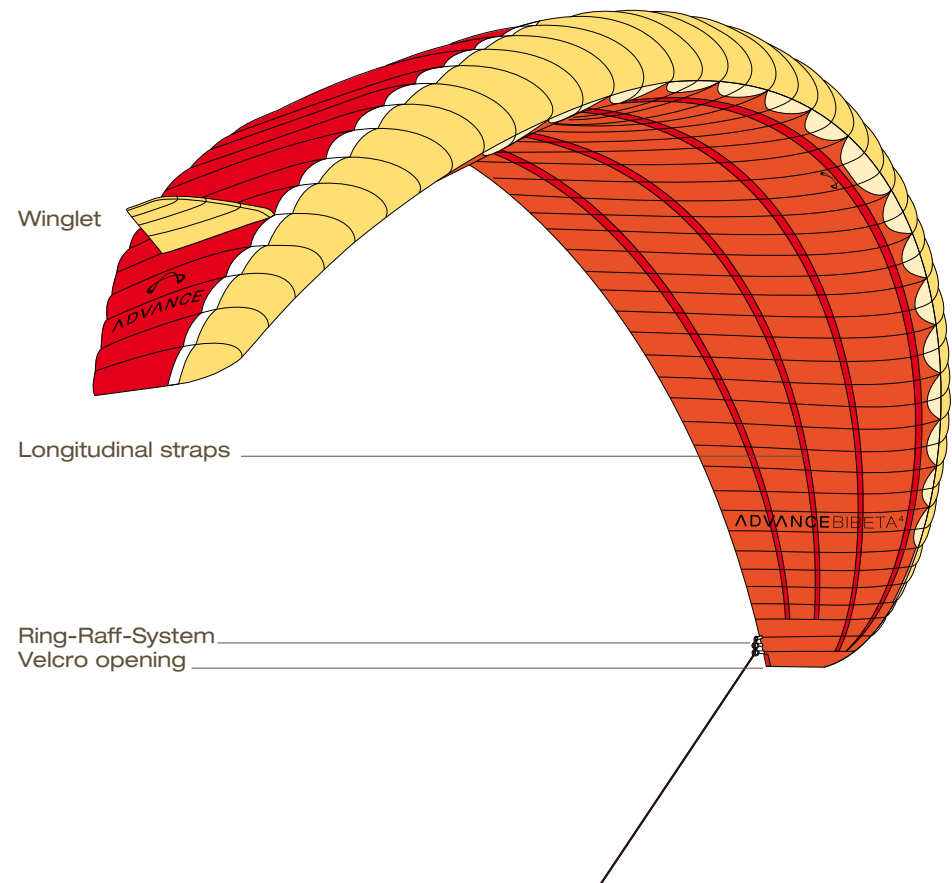




ADVANCE Innovations & Quality

As usual at ADVANCE, even the smallest details were important. This glider is meticulously built, incorporating:

- Mylar reinforced cell walls and leading edge for an easy take off. The leading edge of the canopy is pre-shaped ready for inflation on the ground due to the layout of the reinforcing. The stability in accelerated flight is enhanced due to this reinforcing.
- An additional Mylar reinforcement of the leading and trailing edge improves the durability and longevity of the glider.
- Longitudinal straps ensure a better stability of the canopy and prevent unnecessary movement that can influence the performance and the handling of the glider.
- All the stitching is internal to prevent the seams from abrasion.
- All cells are scaled and diminish in size from the centre of the wing to the wing-tips. This prevents wrinkles along the cell walls and assures a beautifully clean aerodynamic shape. Advance, having pioneered cell scaling, now incorporate a feature practically unique amongst range of wings on the market today. Not only are the cells scaled across the span, they are scaled internally across the chord of the wing - in order to achieve the cleanest, crease-free profile.
- The brake handles are fixed with a magnetic clip to allow easy access. The shape and the flexibility of the brake handles ensure maximum comfort even after hours of flying.



- The brake line swivel is another innovative idea from ADVANCE. It prevents the brake lines from twisting up if you usually fly with a wrap.
- The winglets, which are an important aerodynamic element, are a trademark of our wings. They reduce the turbulence at the wingtip (Vortex-effect) and can improve the handling.
- The velcro openings at the wing tips make the removal of dirt and debris much easier.
- The “ring raff system” improves the homogeneity of the brake and turn behaviour of the glider.





ADVANCE Models



ADVANCE ALPHA

The ALPHA is ideal for trainee pilots and pilots who want the maximum in passive safety. Easy take-off behaviour, direct and agile handling as well as light control pressure are the hallmarks of this paraglider.

ADVANCE EPSILON

The EPSILON is placed right in the middle of the DHV 1-2 category and offers a very high level of passive safety. Thanks to the well known ADVANCE handling, the Epsilon is a superb wing for long thermal flights. This wing will help inexperienced pilots realise their flying aspirations and take the first steps towards XC flying.

ADVANCE SIGMA

The top performance intermediate SIGMA belongs to the latest generation of DHV 2 rated cross-country paragliders. The SIGMA pilot possesses the necessary flying sensitivity and already has experience in cross-country flying. Pilots switching from a lower class will soon find themselves at home thanks to the balanced take-off behaviour and high intrinsic safety. The SIGMA helps the pilot to improve his ability safely.

ADVANCE OMEGA

The OMEGA is a purebred high-performance paraglider for performance-oriented long-distance or competition pilots. The glider exhibits predictable and extremely direct handling which facilitates precise turn initiation and infinitely variable re-centering at all bank angles. In addition, the balance between the profile and air foil twist ensures the requisite thermal bite and exceptional canopy feedback.





Thank you for flying **ADVANCE**®